

Year 2001 Annual Air Quality Awareness Survey Summary Report

Conducted for

Mid-America Regional Council

by

ETC Institute

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December 2001

Overview

During the Fall of 2001, Mid-America Regional Council (MARC) conducted its Annual Air Quality Survey of residents in the metropolitan Kansas City area. The survey is part of an ongoing effort to measure the impact that air quality education efforts have had on the public's overall awareness and behavior. The Annual Air Quality Survey provides a benchmark for objectively evaluating the sustained impact of air quality education.

The survey was administered by mail with follow-ups by phone to a randomly selected sample of 606 Kansas City area residents. The overall results have a 95% level of confidence with a precision of at least +/- 4%. The distribution of respondents by county was as follows: 13% Wyandotte, 28% Johnson, 14% Clay, 8% Platte and 36% Jackson; 1% did not provide address information.

Findings

- In 2000, 91% of those surveyed knew that air pollution levels in the Kansas City area usually exceed EPA standards on several days during the summer. In 2001, 81% of those surveyed knew this information.
- In 2000, almost all (94%) of the people surveyed remembered hearing about an Ozone Alert day during the previous summer. In 2001, 83% of those surveyed remembered hearing about an Ozone Alert day. The decrease may be attributed to the reduction in the number of Ozone Alert days during the summer of 2001 compared to 2000.
- Sixty-four percent (64%) of those surveyed indicated that they had taken action on at least one Ozone Alert day during the summer of 2001 to help reduce air pollution; this was down from 76% in 2000.
- Although the overall percentage of persons who are taking action to help reduce air pollution has declined, those who are taking action are doing more. For example, in 2000, 56% of those who took action did not “top off” their gas tank. In 2001, 75% of those who took action did not “top off” their tank. In 2001, 82% waited until the evening to refuel their car compared to 62% in 2000; and 33% drove less on Ozone Alert days in 2001 compared to 30% in 2000.
- In 2000, 47% of those surveyed indicated that they knew Ozone Alerts refer to high levels of ozone in the air people breathe. In 2001, the percentage had risen to 52%. Nearly one-third (31%) of those surveyed continue to think that Ozone Alerts refer to problems caused by a hole in the ozone layer of the atmosphere.
- In 2001, 41% of the residents surveyed had heard or seen promotional materials about air quality in the Kansas City area. This was a significant increase from 33% in 2000 and 25% in 1999.

Year 2001 MARC AIR QUALITY SURVEY

1. **Are you aware that the Kansas City area usually has several days each summer when air pollution levels exceed the health standards set by the Environmental Protection Agency?**
☐ (1) Yes
☐ (2) No
2. **Do you or anyone in your household have a breathing or respiratory problem?**
☐ (1) Yes
☐ (2) No
3. **How concerned are you about the health consequences of poor air quality in the Kansas City area?**
☐ (1) Very concerned
☐ (2) Somewhat concerned
☐ (3) Not sure
☐ (4) Not concerned
4. **Do you think air pollution in the Kansas City area is:**
☐ (1) Getting much worse
☐ (2) Getting somewhat worse
☐ (3) Staying the same
☐ (4) Getting somewhat better
☐ (5) Getting much better
5. **Do you think you can personally do anything to help improve air quality in the Kansas City area?**
☐ (1) Yes
☐ (2) No
☐ (3) Not sure
6. **Do you remember hearing about any OZONE ALERT days this past summer?**
☐ (1) Yes
☐ (2) No
7. **What do you think an OZONE ALERT day means? [Check all that apply]**
☐ (1) High mold/pollen levels in the air
☐ (2) High tire particle counts in the air
☐ (3) High ozone levels in the air
☐ (4) The hole in the ozone layer has made it unhealthy to be outside
☐ (5) The air is dirty/polluted
☐ (6) Other: _____
8. **Have you seen or heard the phrase OZONE ALERT used to describe air quality in the Kansas City area from any of the following sources? [Check all that apply]**
☐ (1) Newspaper
☐ (2) Radio
☐ (3) Morning television
☐ (4) Evening television
☐ (5) Website
☐ (9) Other: _____

2001 Annual Air Quality Survey – Survey Questions

- 8a. Which one of these sources do you consult most often?
_____ [Record number from Q8.]
9. Have you seen or heard any advertisements, brochures, billboards, radio or other promotional media about air quality in the Kansas City area during the past year?
____ (1) Yes
____ (2) No
- 9a. [IF YES to question #9]: What types of promotional media have you seen or heard? [Check all that apply]
____ (1) Billboards
____ (2) Advertisements in newspapers, magazines or other print media
____ (3) Commercial TV Advertising
____ (4) Movie theater slides
____ (5) Brochures
____ (6) Radio
____ (7) Other
- 9b. Which one of these types of promotional media provide you with the most frequent information about air quality?
_____ [Record number from Q9a.]
10. How interested would you be in getting air quality information on the Internet?
____ (1) Very interested
____ (2) Somewhat interested
____ (3) Not sure
____ (4) Not interested
11. Compared to two years ago, would you say you:
____ (1) are more aware of air quality issues in the Kansas City area
____ (2) have about the same level of awareness of air quality issues
____ (3) are less aware of air quality issues in the Kansas City area
____ (4) Not applicable (did not live in Kansas City two years ago)
12. Have you seen SKYCAST information during the weather forecast on local television news?
____ (1) Yes
____ (2) No
- 12a. [IF YES to question #12]: On which TV stations have you seen SKYCAST information? [Check all that apply]
____ (1) NBC - Channel 41
____ (2) CBS - Channel 5
____ (3) Fox - Channel 4
____ (4) ABC - Channel 9
____ (5) Other: _____
- 12b. [IF YES to question #12]: How important do you think it is for local television stations to provide SKYCAST information?
____ (1) Very important
____ (2) Somewhat important
____ (3) Not sure
____ (4) Not important
13. An air pollution OZONE ALERT indicates that weather conditions may lead to poor air quality. Using a 5-point scale where "5" means very willing and "1" means not willing, how willing would you be to do each of

2001 Annual Air Quality Survey – Survey Questions

the following on an "OZONE ALERT" day in the Kansas City area?	Not Willing	Very Willing	Not Willing	Very Willing
A) Carpool on the "OZONE ALERT" day.....	1	2	3	4
B) Postpone mowing lawn with gasoline powered lawnmower for a day or two.....	1	2	3	4
C) Not use lighter fluid on an outdoor charcoal grill	1	2	3	4
D) Fill up your car with gasoline in the evening rather than during the day	1	2	3	4
E) Quit "topping" off your gas tank	1	2	3	4
F) Use public transportation	1	2	3	4
G) Use a bicycle or walk to work or to run errands.....	1	2	3	4

14. How important is it for you to know when it is an OZONE ALERT day in the Kansas City area?

<input type="checkbox"/> (1) Very important <input type="checkbox"/> (2) Somewhat important	<input type="checkbox"/> (3) Not sure <input type="checkbox"/> (4) Not important
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15. Did you do any of the actions listed above this past summer because you heard therewas an OZONE ALERT?

☐ (1) Yes [go to question #15a]
☐ (2) No

15a. [IF YES to question #15]: Which actions did you take? [Check all that apply]

<input type="checkbox"/> (1) Carpooled <input type="checkbox"/> (2) Postponed mowing lawn <input type="checkbox"/> (3) Did not use lighter fluid on grill <input type="checkbox"/> (4) Did not fill up car during the day	<input type="checkbox"/> (5) Did not "top" off gas tank <input type="checkbox"/> (6) Used public transportation <input type="checkbox"/> (7) Used a bicycle or walked <input type="checkbox"/> (8) Reduced driving <input type="checkbox"/> (9) Other
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16. Would the following make you *Much more willing*, *Somewhat more willing* or *Less willing* to take action to reduce air pollution in greater Kansas City? If it would not affect you, circle *No change*.

	<u>Much more</u> <u>willing</u>	<u>Somewhat more</u> <u>willing</u>	<u>No</u> <u>change</u>	<u>Less</u> <u>willing</u>
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If you were told that reducing air pollution could decrease the chances that people in your family would develop asthma or other respiratory problems.

1 2 3 4

If you knew that good air quality benefits the regional economy by making it easier for new industries to locate in the Kansas City region, creating new jobs.

1 2 3 4

If you were told that increased air pollution could lead to new regulations, such as a required vehicle emissions testing program, in the Kansas City region.

1 2 3 4

If you were told that keeping your car tuned up could save you money

1 2 3 4

If you knew that driving less reduced our country's dependence on imported oil, making us less

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vulnerable to oil cartels, political instability in other parts of the world. etc.

1 2 3 4

If your doctor gave you information about the health effects of air pollution

1 2 3 4

If your child learned about air pollution at school and asked you to drive less, refuel after 7:00, etc

1 2 3 4

H) If the air doesn't look polluted.

1 2 3 4

I) If the air does look polluted.

1 2 3 4

J) If public transportation services were easier to use and went to more places

1 2 3 4

K) If there were more opportunities for safe bicycling

1 2 3 4

17. What other factors not mentioned here would motivate you to help reduce air pollution?

18. What is your age?

___(1) Under 25

___(5) 55 to 64

___(2) 25 to 34

___(6) 65 or older

___(3) 35 to 44

___(7) [DO NOT READ] Refused

___(4) 45 to 54

19. How many cars, trucks or SUVs are in your household?

Cars _____ Trucks _____ SUVs _____

20. What county do you live in?

___(1) Clay

___(4) Platte

___(2) Jackson

___(5) Wyandotte

___(3) Johnson (KS)

21. Would you say your total annual household income is:

___(1) Under \$20,000

___(3) \$50,000 to \$74,999

___(2) \$20,000 to \$49,999

___(4) \$75,000 or more

22. Your gender

___(1) Male

___(2) Female

23. Would you be interested in participating in a focus group or other discussion about air quality in Kansas City sometime in the future?

___(1) Yes

___(2) No

IF YES, please provide your name and phone number below:

Your name: _____ **Phone Number:** (____) _____

26. Would you be interested in receiving an e-mail message that notifies you when it is OZONE ALERT day?

n

2001 Annual Air Quality Survey – Survey Questions

___(1) Yes

___(2) No

IF YES, please provide your e-mail address below:

E-mail: _____

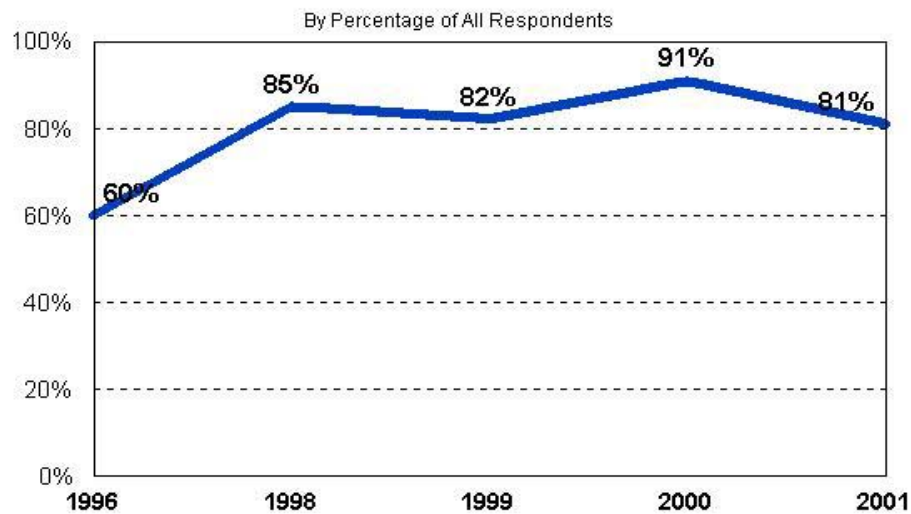
THANKS FOR YOUR HELP - THIS CONCLUDES THE SURVEY!

Please return your completed survey in the enclosed postage-paid, return reply envelope to:

ETC Institute
725 W. Frontier Circle
Olathe, KS 6606

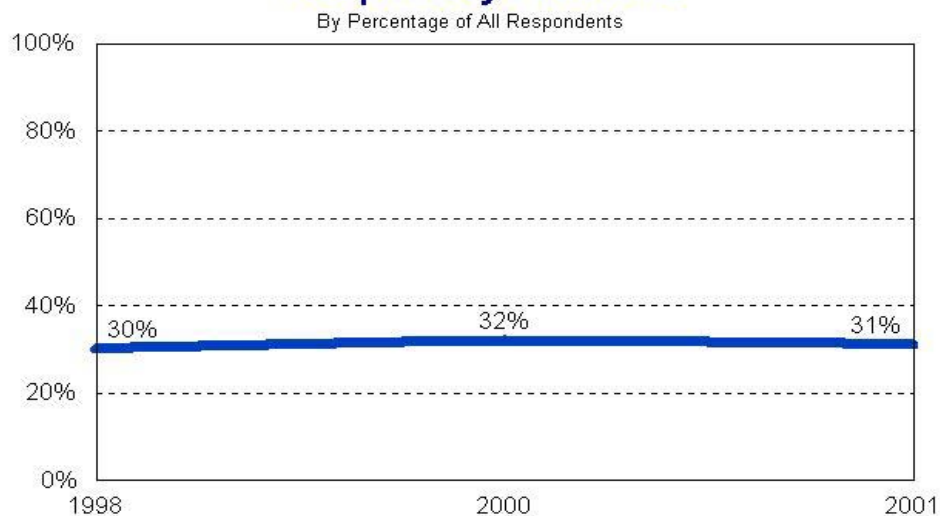
If you have questions, please call (913) 829-1691.

Q1: Percentage of Residents Who Know Air Pollution Levels in the Kansas City Area Usually Exceed EPA Standards on Several Days During the Summer



Sources: ETC Institute Surveys (Spring 1996, Fall 1998, Fall 1999, Fall 2000, Fall 2001)

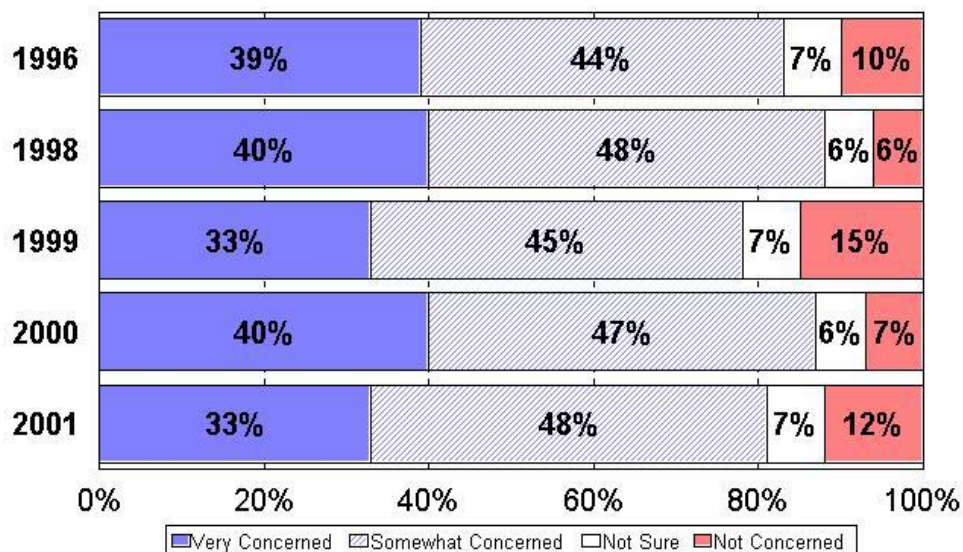
Q2: Percentage of Households in the Kansas City Area that Have at Least One Person Who Has Breathing or Respiratory Problems



Source: ETC Institute Survey (Fall 1998, Fall 2000, Fall 2001)

Q3: How Concerned Residents Are About the Health Consequences of Poor Air Quality in the Kansas City Area

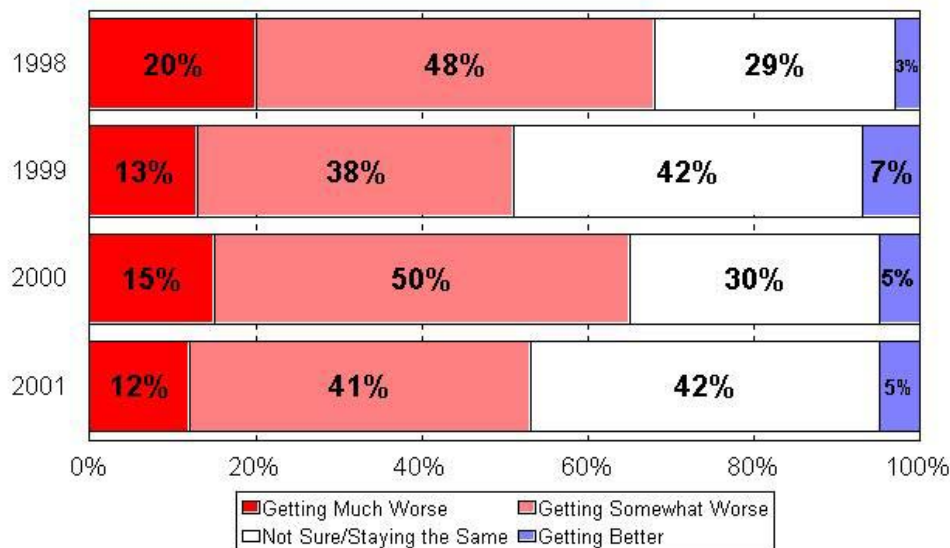
By Percentage of All Respondents



Sources: ETC Institute Surveys (Spring 1996, Fall 1998, Fall 1999, Fall 2000, Fall 2001)

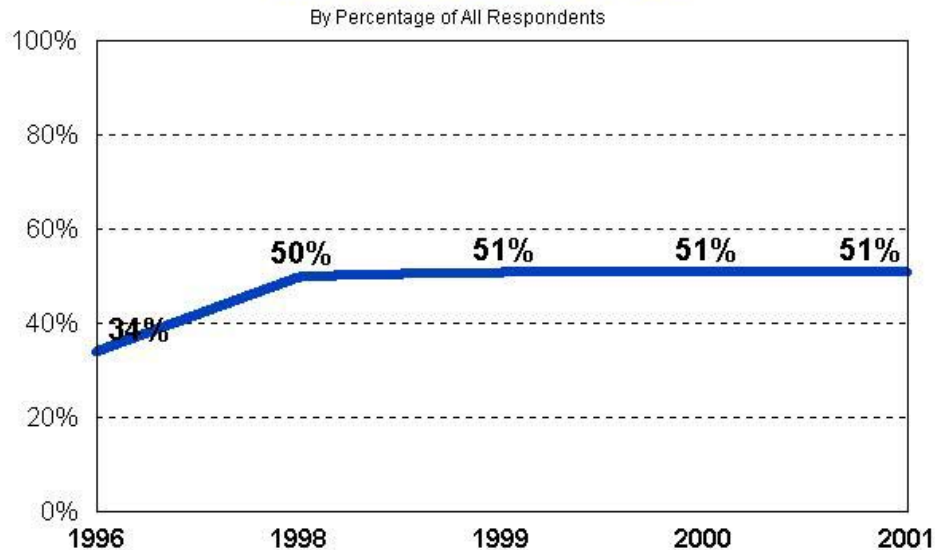
Q4: How Residents Think Air Quality in the Kansas City Area Is Changing

By Percentage of All Respondents



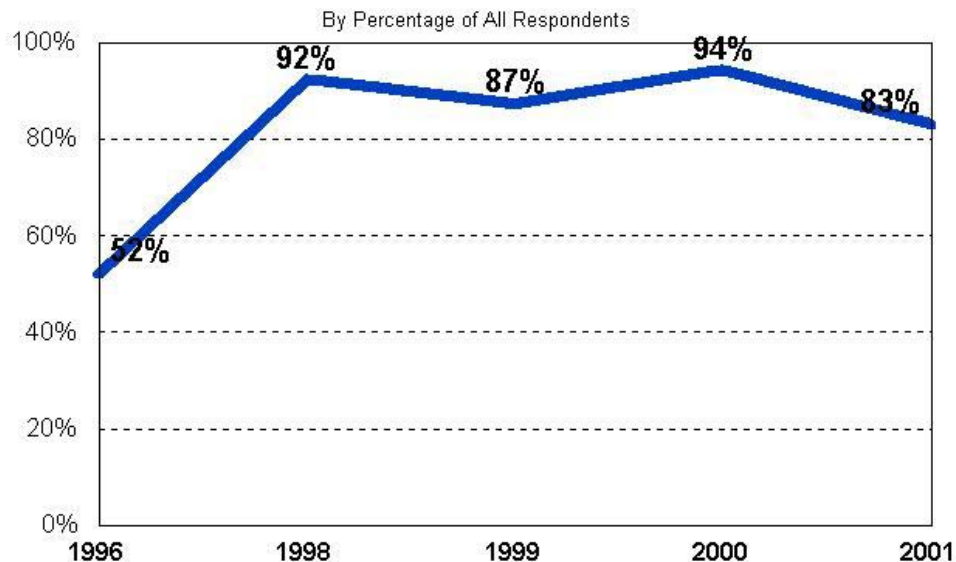
Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

Q5: Percentage of Residents Who Think They Can Do Something to Help Improve Air Quality in the Kansas City Area



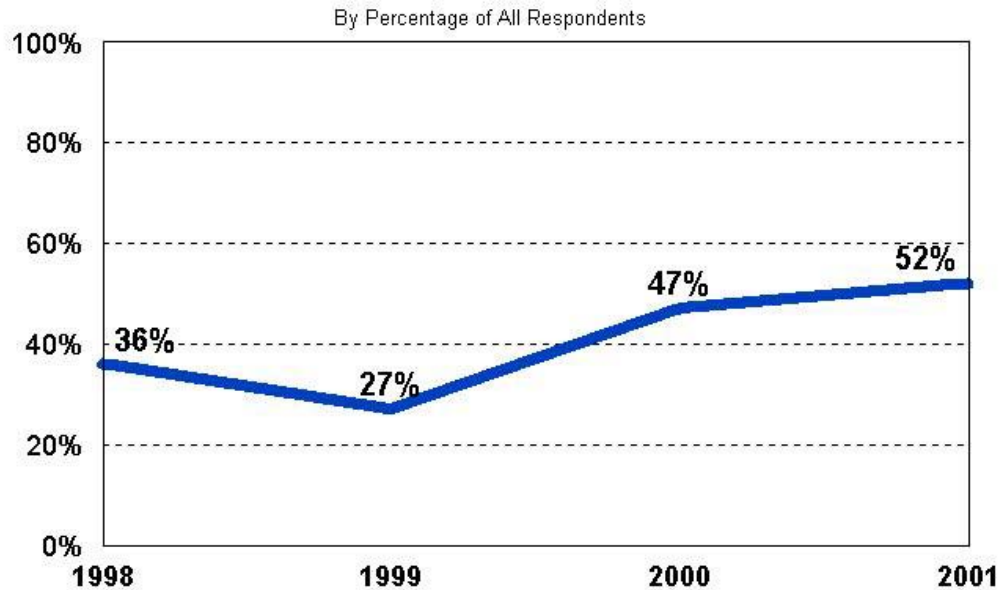
Sources: ETC Institute Surveys (Spring 1996, Fall 1998, Fall 1999, Fall 2000, Fall 2001)

Q6: Percentage of Residents Who Remembered Hearing About OZONE (RED) ALERT Days During the Previous Summer



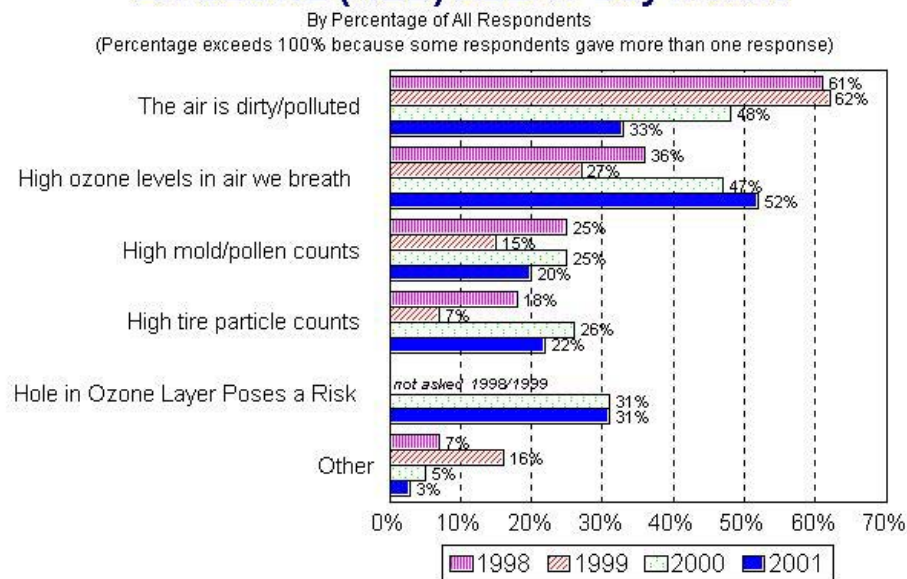
Sources: ETC Institute Surveys (Spring 1996, Fall 1998, Fall 1999, Fall 2000, Fall 2001)

Q7: Percentage of Residents Who Knew the Actual Meaning of an "Ozone Alert Day"



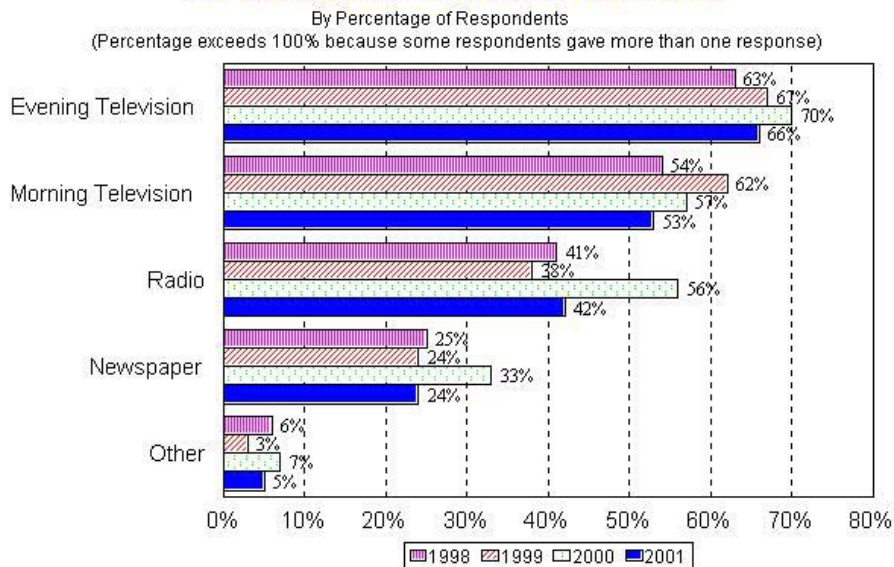
Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

Q7: What Kansas City Area Residents Think An OZONE (RED) ALERT Day Means



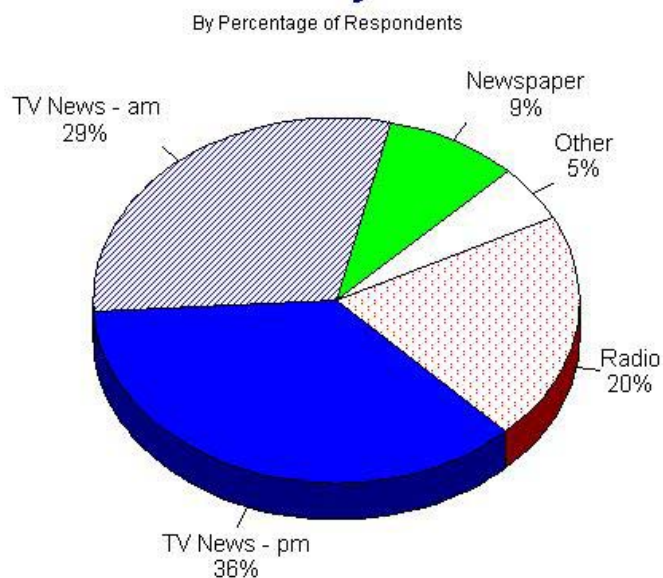
Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

**Q8: Where Residents Have Seen or Heard the Phrase
OZONE (RED) ALERT Used to Describe Poor
Air Quality in the Kansas City Area**



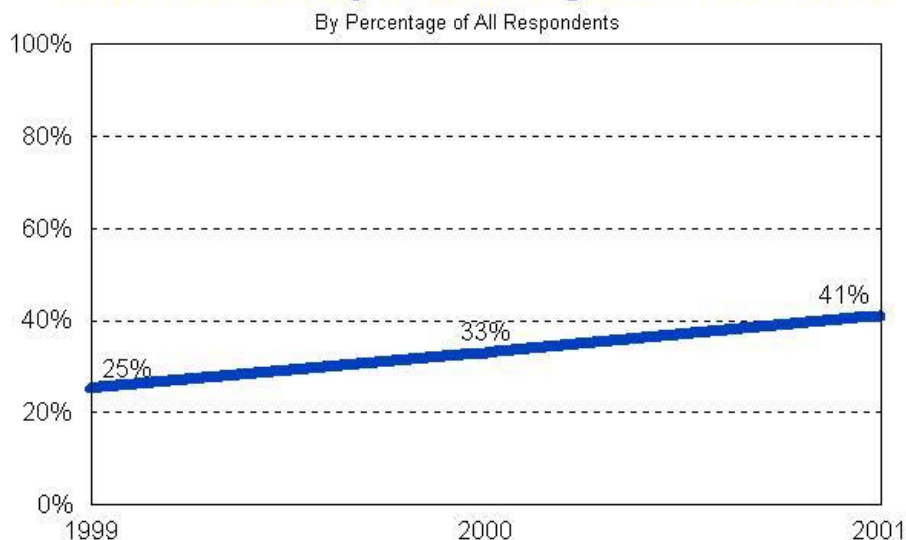
Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

**Q8a: Where Residents Get Information About
Ozone Alert Days Most Often**



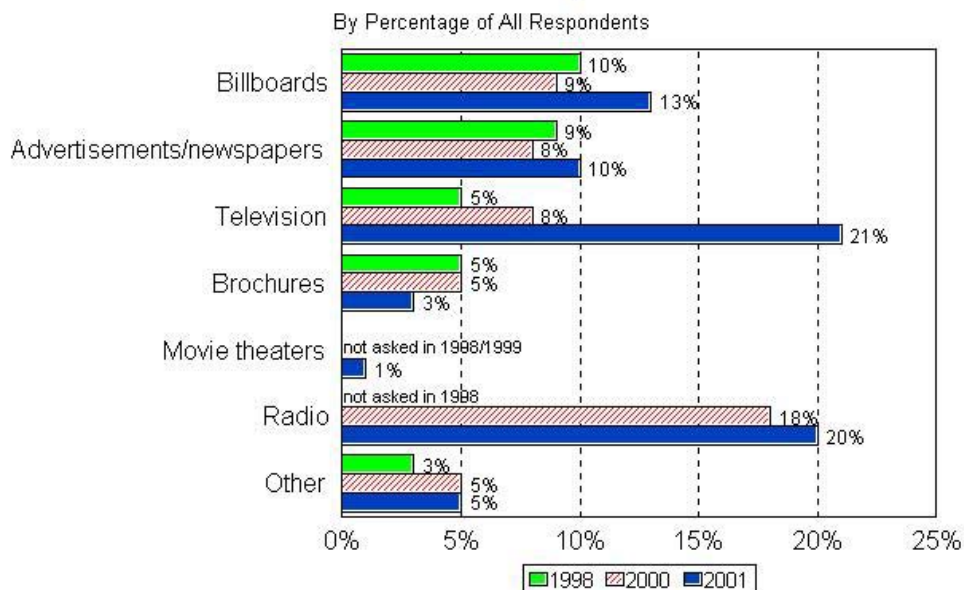
Source: ETC Institute Survey (Fall 2001)

Q9: Percentage of Residents Who Had Seen or Heard Promotional Materials About Air Quality in the Kansas City Area During the Previous Year



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001)

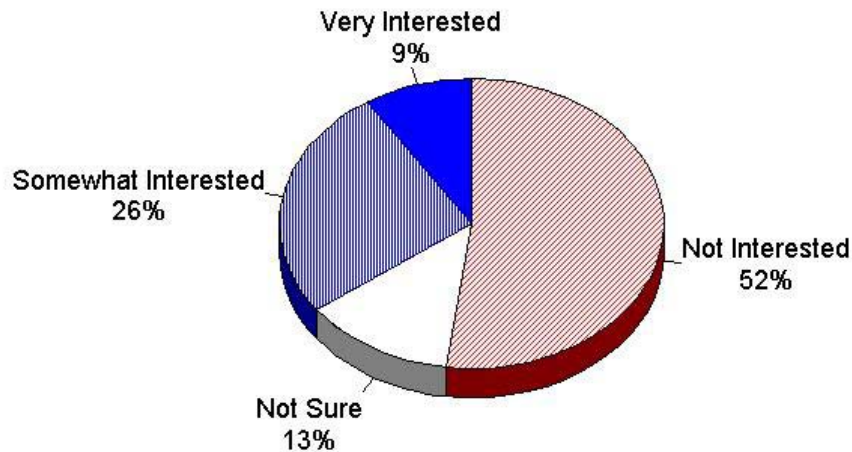
Q9a: Percentage of Residents Who Have Seen or Heard Specific Types of Promotional Materials About Air Quality in the Kansas City Area



Sources: ETC Institute Surveys (Fall 1998, Fall 2000, Fall 2001)

Q10: How Interested Residents Are in Getting Information About Air Quality Issues on the Internet

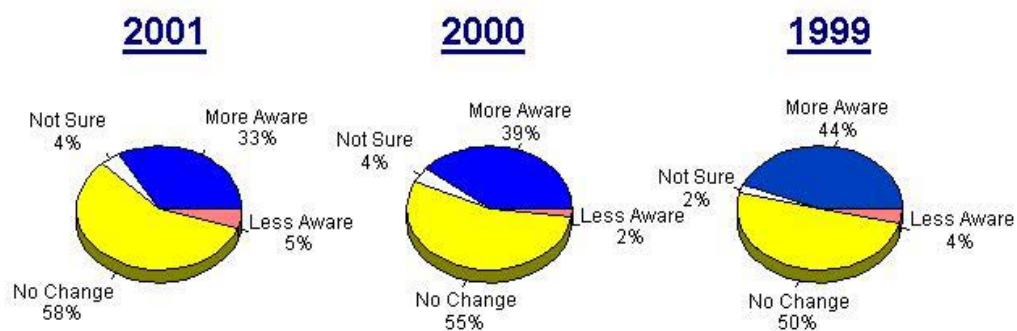
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2001)

Q11: How Residents Think Their Awareness of Air Quality Issues in the Kansas City Area Has Changed During the Past Two Years

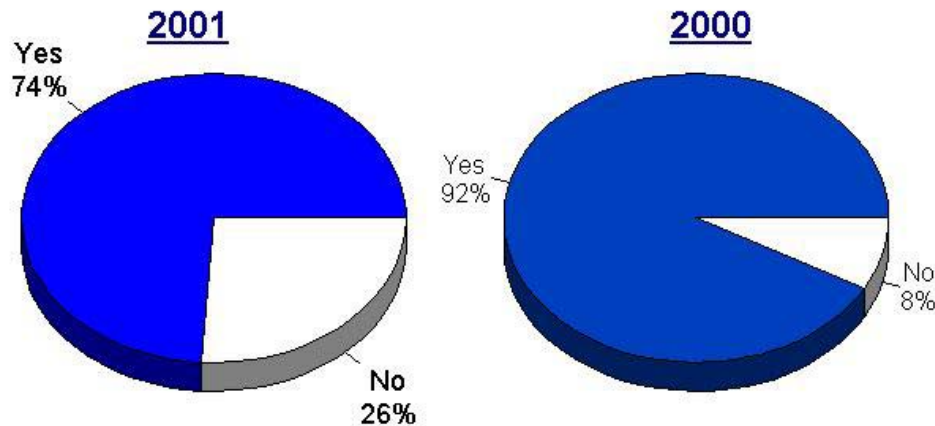
By Percentage of All Respondents



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001)

Q12: Have You Seen Skycast (OZONE ALERT) Information During Weather Forecasts on Local Television News

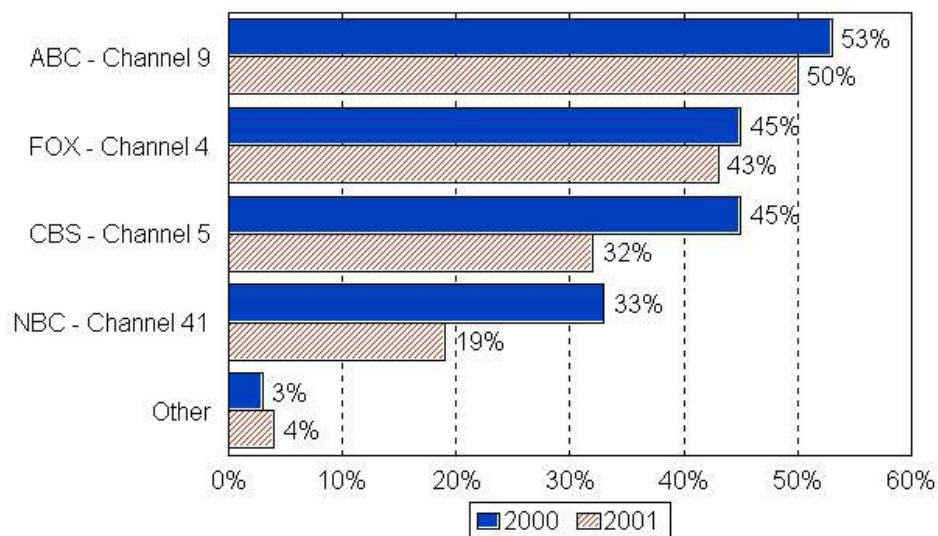
By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 2000, Fall 2001)

Q12a: Percentage of Residents Who Have Seen Skycast (OZONE ALERT) Information on Local Television Stations

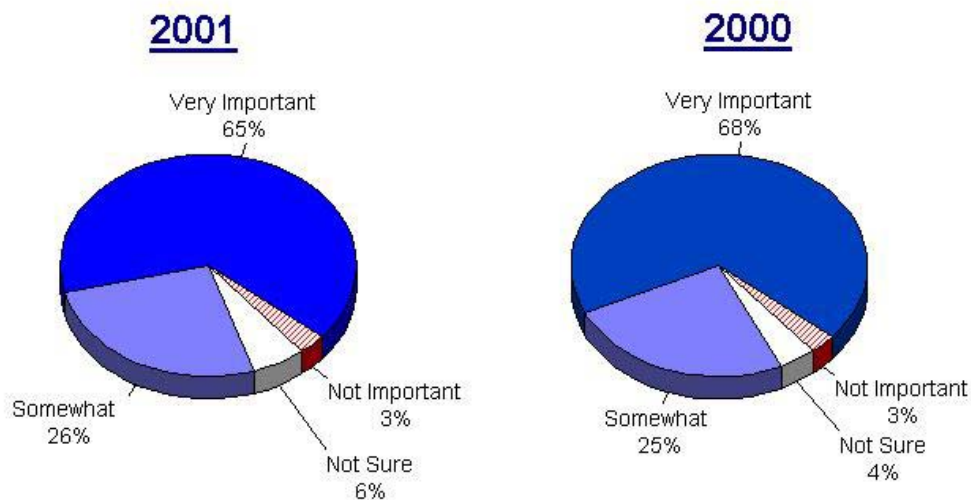
By Percentage of All Respondents Who Have Seen Skycast (Ozone Alert) Information



Source: ETC Institute Surveys (Fall 2000, Fall 2001)

Q12b: How Important Residents Think It Is For Local Television News to Provide Skycast (OZONE ALERT) Information

By Percentage of All Respondents

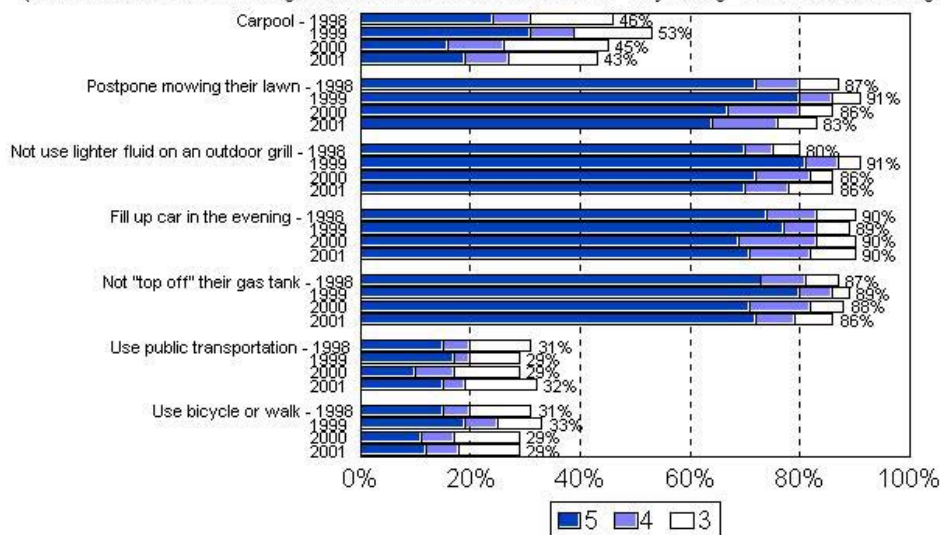


Source: ETC Institute Surveys (Fall 2000, Fall 2001)

Q13: Willingness of Residents to Do Various Activities on an OZONE (RED) ALERT Day in the Kansas City Area

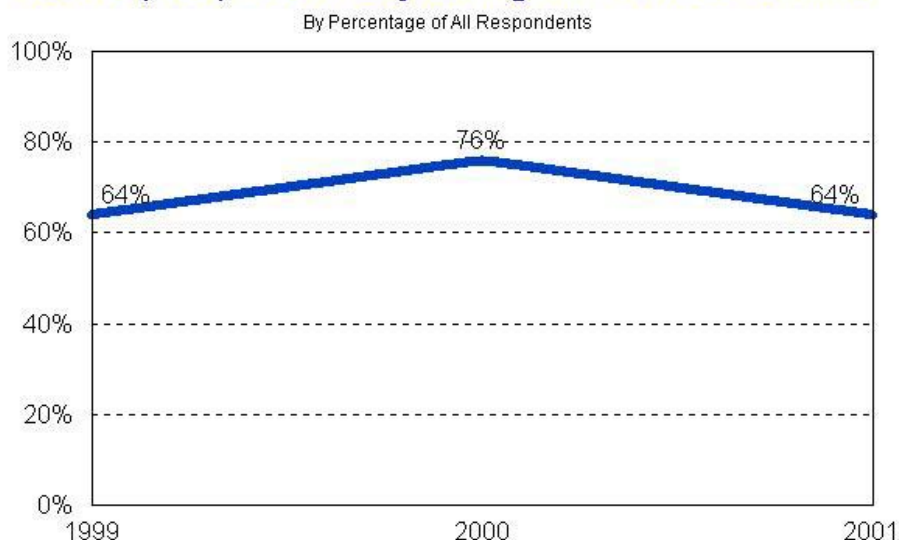
By Percentage of All Respondents

(Residents Rated Their Willingness on a Scale of 1-5 where 5 was "very willing" and 1 was "not willing")



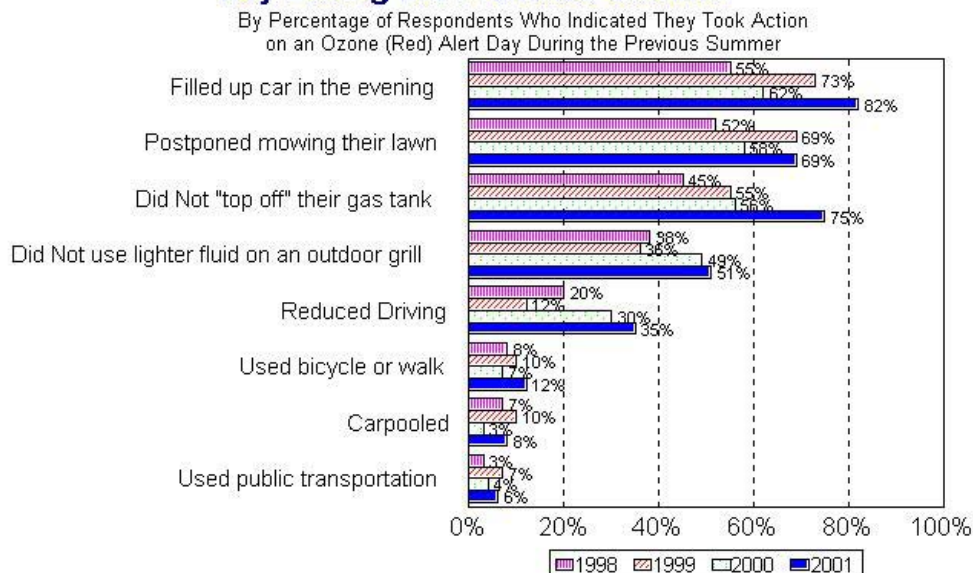
Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

Q14: Percentage of Kansas City Area Residents Who Took an Action to Help Reduce Air Pollution at Least Once on an OZONE (RED) ALERT Day During the Previous Summer



Sources: ETC Institute Surveys (Fall 1999, Fall 2000, Fall 2001)

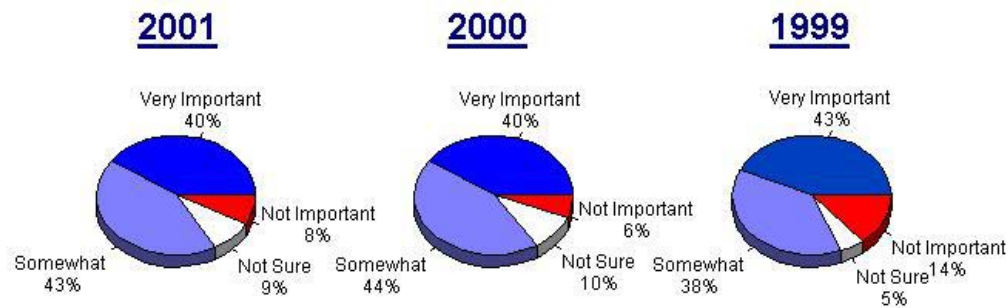
Q14a: Percentage of Kansas City Area Residents Who Took Specific Actions at Least Once on an OZONE (RED) ALERT Day During the Previous Summer



Sources: ETC Institute Surveys (Fall 1998, Fall 1999, Fall 2000, Fall 2001)

**Q15: Importance of Knowing When It Is an OZONE (RED)
ALERT Day in the Kansas City Area**

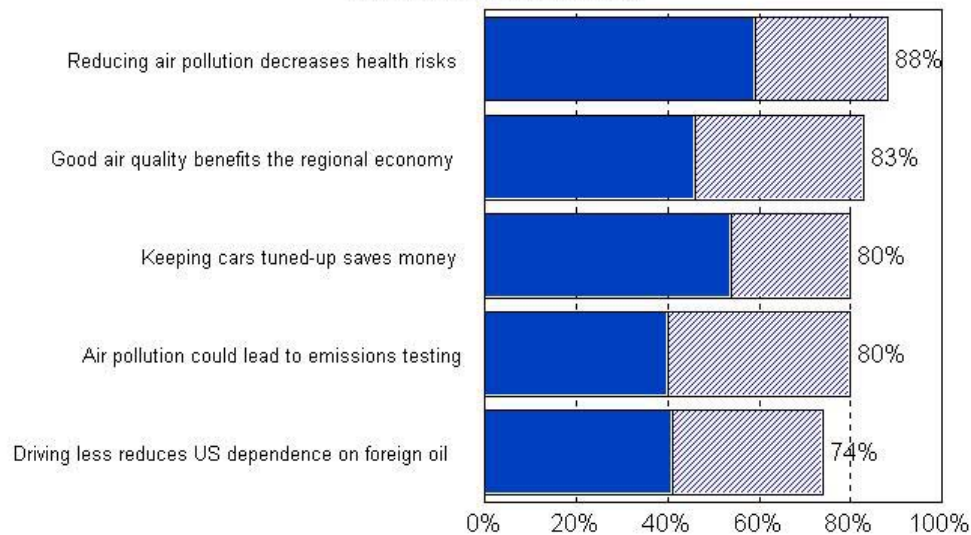
By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 1999, Fall 2000)

**Q16a-e: How Various Messages Would Effect the Willingness of
Residents to Take Action to Help Reduce Air Pollution**

By Percentage of All Respondents



Source: ETC Institute Surveys (Fall 2001)

Q17: Other Factors That Would Motivate Residents to Help Reduce Air Pollution (open-ended response)

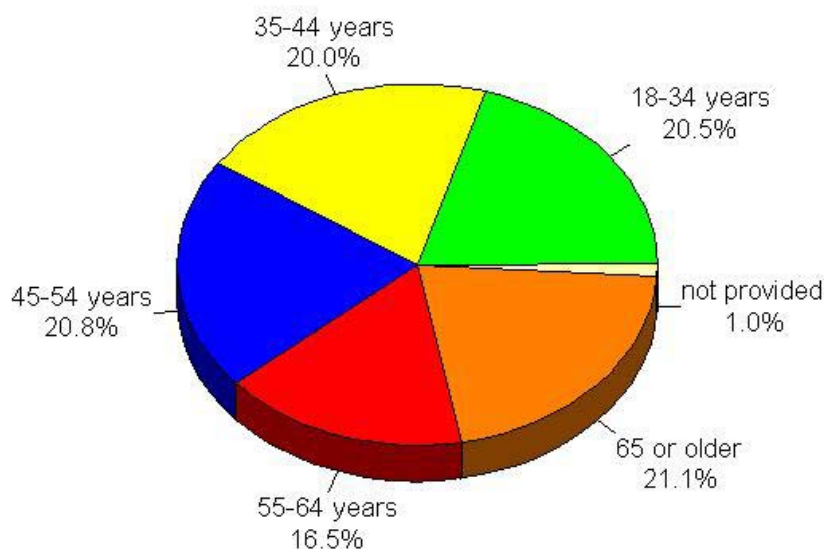
Selected Responses

- ☐ IF A FAMILY MEMBER HAD A BREATHING PROBLEM
- ☐ MORE & BETTER INFO ABOUT DETRIMENTAL EFFECTS
- ☐ NOTHING
- ☐ TAX BREAK, FINANCIAL INCENTIVE
- ☐ IF THEY STARTED FINING PEOPLE
- ☐ IF PRICE OF GAS GOES UP
- ☐ IF PUBLIC TRANSPORTATION WERE BETTER
- ☐ IF I HAD PERSONAL HEALTH PROBLEMS
- ☐ IF IT AFFECTED WATER OR PLANTS

Source: ETC Institute Survey (Fall 2001)

Q18: Age of Respondents

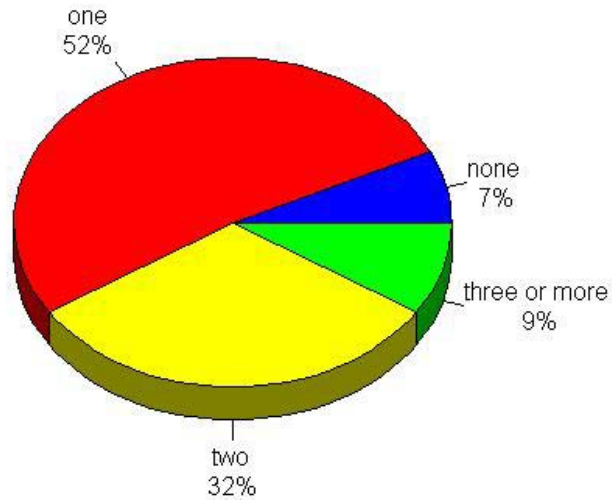
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2001)

Q19: Number of Vehicles in Household

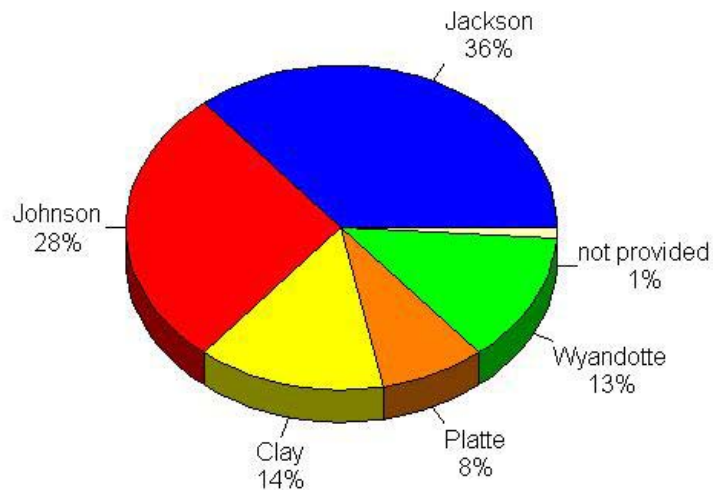
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2001)

Q20: County Where Respondents Live

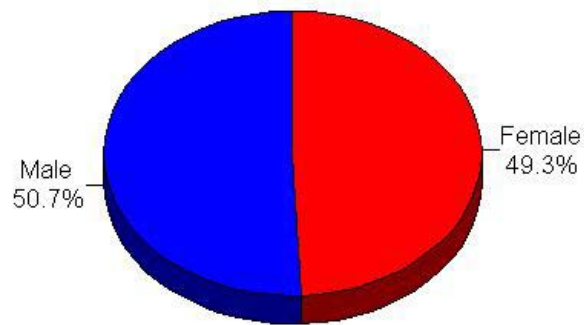
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2001)

Q22: Respondent's Sex

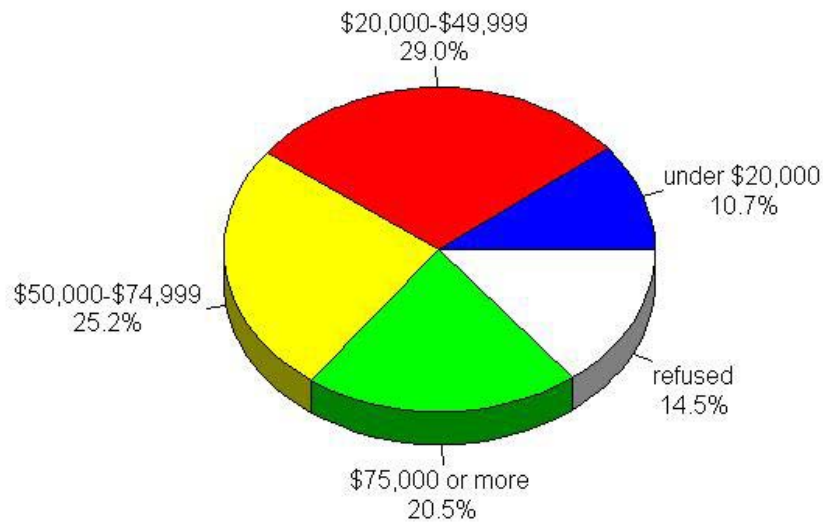
By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2001)

Q21: Annual Household Income

By Percentage of All Respondents



Source: ETC Institute Survey (Fall 2001)

Ozone Alert Day Survey

Executive Summary

Mid-America Regional Council (MARC) conducted a survey of residents in the Kansas City area to measure awareness of Ozone Alert! days and to assess the impact that Ozone Alert! days are having on the behavior of residents in the region. The survey was administered on two Ozone Alert! days during the summer of 2001 between the hours of 4:00-9:00 p.m. The two days were July 18 and August 6.

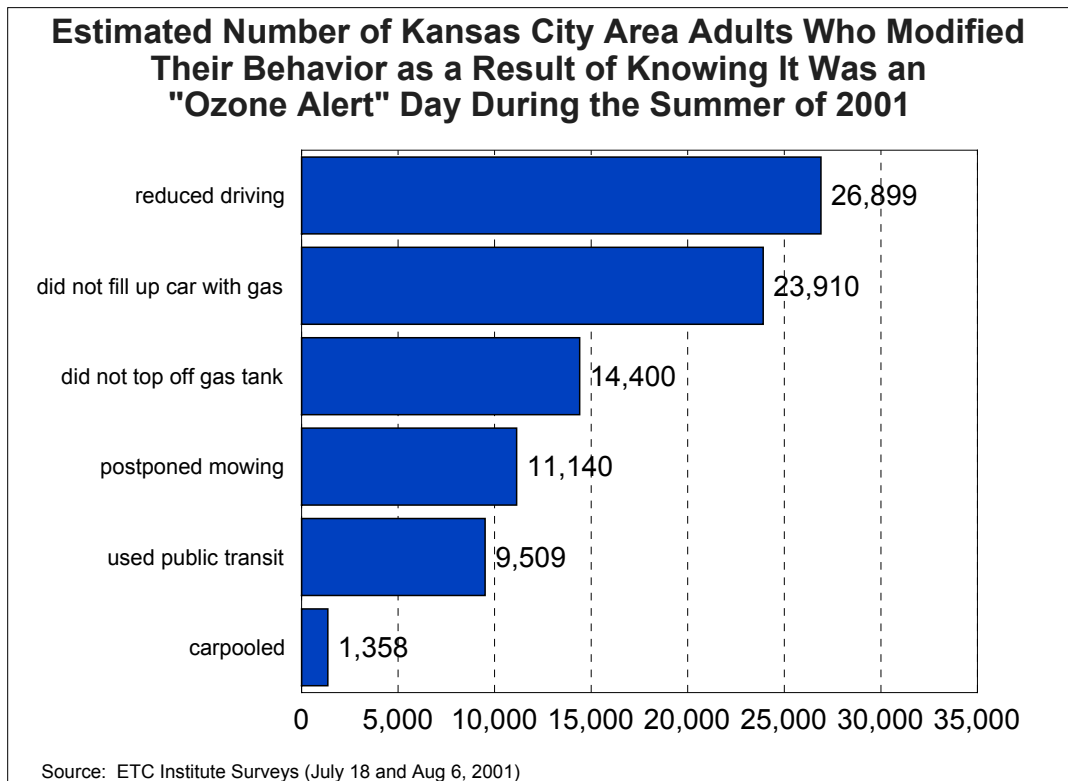
The survey was administered by phone to a random sample of at least 250 persons on each date. The Kansas City area was defined as the five county area of Johnson and Wyandotte Counties in Kansas and Jackson, Clay, and Platte Counties in Missouri. The overall results for each date have a 95% level of confidence with a precision of at least +/-6.4%.

Major Findings

- 87% of those surveyed were familiar with the term “ozone alert.” Altogether 90% of those surveyed were familiar the term “Ozone Alert” or another term, such as “Red Alert” or “Orange Alert.”
- The average number of adults in the Kansas City area who were familiar with the term Ozone Alert! or another term, such as Red Alert,” was approximately 992,200 adults (90.2% of 1.1 million adults in the region).
- On average, an estimated 609,211 adults (61.4% of 992,200 adults who were familiar with the term Ozone Alert! or a similar term) knew when it was an “Ozone Alert” day during the summer of 2001.
- ***During the summer of 2001, an average of 271,708 adults in the Kansas City area modified their behavior*** on “Ozone Alert” days to help reduce air pollution in the metropolitan Kansas City area (44.6% of the 609,211 adults who knew it was an Ozone Alert! day).
- ***Thousands of Kansas City area residents are driving less on Ozone Alert! days.*** The average number of adults in the Kansas City area who drove less as a result of knowing it was an Ozone Alert! was approximately 26,899 adults during the summer of 2001 (9.9% of 271,708 adults who did something differently as a result of knowing it was an Ozone Alert! day). If the average person who drove less as a result of knowing it was an Ozone Alert! day had reduced their total driving time by just ten minutes, the total number of hours that people drove in the Kansas City would have been reduced by an average of nearly 4,500 hours (26,899 persons x 10 minutes/60).

2001 Annual Air Quality Survey – OzoneAlert! Day Summary

- ***Ozone Alert! days are prompting a slight increase in public transit usage. 3.5% of those surveyed indicated that they used public transit as a result of knowing it was an Ozone Alert day.***
- ***42% of those surveyed who knew it was an Ozone Alert! day were informed by morning television.*** Other major sources of information were evening television (25%) and radio (19%).



Ozone Alert Awareness Survey

Date: _____

Phone Number: _____

Interviewer: _____

This is _____. I am calling on behalf of Mid-America Regional Council and local governments in the metropolitan Kansas City area. We are gathering input from residents of the region about air quality in Kansas City. Is now a convenient time to ask you a few questions? The survey takes less than 2 minutes.

If YES: Go to question #1

-
- 1. Have you ever heard of the phrase OZONE ALERT used to describe air quality conditions in the Kansas City Area?**

____ (1) Yes [go to Q#2]

____ (2) No [ask Q#1a]

- 1a. Have you ever heard of the phrase RED ALERT or ORANGE/RED DAY used to describe air quality conditions in the Kansas City Area?**

____ (1) Yes [go to Q#2]

____ (2) No [go to demographics on next page]

-
- 2. Did you know that today was an OZONE ALERT day in the Kansas City area?** (if they said that they were familiar with the term RED ALERT or ORANGE/RED DAY, tell them that OZONE ALERT day means the same thing as RED ALERT or ORANGE/RED DAY)

____ (1) Yes [continue]

____ (2) No [go to demographics on next page]

- 3. How did you find out that it was an OZONE ALERT day?** [check all mentioned]

____ (1) Newspaper

____ (2) Radio

____ (3) Morning television

____ (4) Evening television

____ (5) Notices at Work/school

____ (6) Other: _____

2001 Annual Air Quality Survey – OzoneAlert! Day Survey

4. Did you do anything differently today as a result of knowing that it was an OZONE ALERT day?

____ (1) Yes [go to question #4a]

____ (2) No [go to question #5]

4a. [IF YES to question #4] What did you do? [Check all that are mentioned]

____ (1) Carpooled

____ (2) Postponed mowing lawn

____ (3) Did not use lighter fluid on an outdoor charcoal grill

____ (4) Did not fill up car with gasoline during the day

____ (5) Did not "top" off gas tank

____ (6) Used public transportation

____ (7) Used a bicycle or walked to work or to run errands

____ (8) Reduced driving

____ (9) Stayed inside/avoided exercise

____ (0) Other: _____

RESUME HERE FOR ALL RESPONDENTS

DEMOGRAPHICS

5. Is your age...

____ (1) Under 25

____ (2) 25 to 34

____ (3) 35 to 44

____ (4) 45 to 54

____ (5) 55 to 64

____ (6) 65 or older

____ (7) [DO NOT READ] Refused

6. What county do you live in?

____ (1) Clay

____ (2) Jackson

____ (3) Johnson (KS)

____ (4) Platte

____ (5) Wyandotte

7. Respondent's sex [Do Not Ask Unless You Are Not Certain]

____ (1) Male

____ (2) Female

THANKS FOR YOUR HELP - THIS CONCLUDES THE SURVEY!